

EVALUATION FINDINGS
FOR THE
VIRGINIA COASTAL MANAGEMENT PROGRAM
NOVEMBER 1999 THROUGH JULY 2003

July 2004

Office of Ocean and Coastal Resource Management
National Ocean Service
National Oceanic and Atmospheric Administration
United States Department of Commerce



TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY	1
II.	INTRODUCTION	5
III.	REVIEW PROCEDURES	6
IV.	COASTAL PROGRAM AND COASTAL AREA DESCRIPTION	8
V.	REVIEW FINDINGS, ACCOMPLISHMENTS, AND RECOMMENDATIONS	10
A.	Program Operation and Coordination	
1.	Organization and Administration	
2.	Financial and Technical Assistance	
3.	Programmatic Coordination	
4.	Program Effectiveness and Assessment	
B.	Natural Resource Protection	
C.	Hazards	
D.	Water Quality	
E.	Public Access	
F.	Federal Consistency, Permitting, and Changes to the Statutory and Regulatory Provisions of the VCP	
G.	Public Outreach	
H.	Aquaculture	
VI.	CONCLUSION	32
APPENDIX A.	List of Persons Contacted	33
APPENDIX B.	Persons Attending the Public Meeting	36
APPENDIX C.	Written Comments Received and Responses	37
APPENDIX D.	Response to Previous (Sept. 2000) Evaluation Findings	38

I. EXECUTIVE SUMMARY

A. OVERVIEW

Section 312 of the Coastal Zone Management Act of 1972, as amended (CZMA), requires NOAA's Office of Ocean and Coastal Resource Management (OCRM) to conduct periodic evaluations of the performance of states and territories with federally-approved coastal management programs. This review examined the operation and management of the Virginia Coastal Resources Management Program (VCP) by the Department of Environmental Quality (DEQ) during the period of November 1999 through July 2003.

It is the conclusion of this evaluation that the DEQ is successfully implementing and enforcing its federally-approved coastal management program. This document contains one recommendation that takes the form of a Necessary Action that is mandatory and must be completed by the identified deadline, and three Program Suggestions that denote actions OCRM believes the State should take to improve the program, but which are not mandatory at this time.

B. SUMMARY OF ACCOMPLISHMENTS

The evaluation team documented a number of areas where the VCP improved the management of Virginia's coastal resources. These include:

Program Operation and Coordination - Organization and Administration

1. ACCOMPLISHMENT: The Virginia Coastal Program benefits from a knowledgeable and dedicated staff who are highly respected by their peers and the citizens they serve. The staff is creative and adept at using technology and developing numerous partnerships to extend limited human and financial resources to meet priority goals and address coastal management issues.

Program Operation and Coordination - Financial and Technical Assistance

2. ACCOMPLISHMENT: The VCP has established an appropriate balance for the state's needs between concentrating coastal management funds on one or two larger, long-term projects and funding numerous smaller projects to initiate or maintain them.

3. ACCOMPLISHMENT: The VCP has established an ongoing, mutually beneficial, and supportive relationship with the eight coastal planning district commissions that receive funding to provide technical assistance, outreach, and education to the 88 local

governments in the coastal zone. Such assistance could not be provided by the VCP staff alone. The planning district commissions serve as effective points of contact and coordination, and help pool resources among local governments, state, and federal agencies.

Program Operation and Coordination - Programmatic Coordination

4. **ACCOMPLISHMENT:** Creation of the Coastal Policy Team has provided a valuable mechanism to facilitate communication and cooperation, strengthen the common identity of the network of coastal agencies and partners, focus individual agency efforts towards coastal program goals, reach consensus on priorities and issues, and devise successful funding strategies for the VCP.
5. **ACCOMPLISHMENT:** One of the Virginia Coastal Program's strengths is the staff's ability to partner with and involve many groups in the VCP's initiatives and projects. This enables the VCP to accomplish more than would be possible with the small staff in the VCP-DEQ office and with traditional agency and government partners. It is also an effective way to promote the Virginia Coastal Program.

Program Operation and Coordination - Program Effectiveness and Assessment

6. **ACCOMPLISHMENT:** The Virginia Coastal Program has begun an excellent effort to clearly identify coastal goals and objectives and develop a performance indicator system to identify successes and measure progress toward meeting the goals of the program.

Natural Resource Protection

7. **ACCOMPLISHMENT:** The Virginia Oyster Heritage Program has proven to be an innovative and effective approach to focusing the financial resources and efforts of a partnership of governmental and non-governmental agencies and groups to support and advance oyster reef restoration efforts and the natural resource, water quality, and economic benefits that restoration brings. It has also provided very meaningful visibility for the Virginia Coastal Program.
8. **ACCOMPLISHMENT:** The Virginia Seaside Heritage Program has identified a significant number of public and private partners, outlined attainable goals, and during its first year has conducted numerous projects aimed at the preservation and restoration of natural resources. The Program is the second focal area in a model of concentrated coastal

resource management effort and significant funding that appears to be successful for the state.

9. ACCOMPLISHMENT: The VCP has addressed the importance of nontidal wetlands in the Commonwealth through legislation that established an independent nontidal wetlands program at DEQ with revisions to the permit program. This has increased the protection provided to these wetlands through changes to the existing permitting program.

10. ACCOMPLISHMENT: The VCP has sustained a long-term commitment to the SAMP process and to the program's active SAMPs. The coastal environment and the citizens of Virginia are the beneficiaries of this effort.

Hazards

11. ACCOMPLISHMENT: The VCP and Coastal Policy Team recognized and have begun to address the need for additional information about, analysis of, and protection mechanisms for dune and beach systems not protected by existing laws and regulations.

Water Quality

12. ACCOMPLISHMENT: The state has been a leader in the development and implementation of the coastal nonpoint pollution control program, has been effective at coordinating among agencies to wisely use limited nonpoint program implementation funds, and has established a capable working partnership among all entities involved in water quality issues.

Public Access

13. ACCOMPLISHMENT: The VCP has shown a strong, ongoing commitment to supporting public access. It does so throughout many of its programs and projects for which it provides financial and technical assistance.

Public Outreach

14. ACCOMPLISHMENT: The VCP has an effective, well integrated suite of outreach and education tools, including an impressive website that is well populated and well maintained and a very informative and readable coastal magazine.

C. SUMMARY OF RECOMMENDATIONS

In addition to the accomplishments discussed above, the evaluation team has identified areas where the program could be strengthened or improved. These include:

Program Operation and Coordination - Programmatic Coordination

1. PROGRAM SUGGESTION: The VCP and the Coastal Policy Team should consider developing a formal mechanism for communicating policy recommendations, suggestions, requests, or other information through departmental agency heads to the Secretary of Natural Resources.

Program Operation and Coordination - Program Effectiveness and Assessment

2. PROGRAM SUGGESTION: The VCP is encouraged to continue its work on a state coastal management performance indicator system and, to the extent possible, to closely align its efforts with the work toward a national coastal management indicator system being conducted by NOAA. The state is urged to participate in and comment on the work of NOAA and state participants in the development of a national performance indicator system and to share the VCP's experiences in its system development efforts with other states.

Federal Consistency, Permitting, and Changes to the Statutory and Regulatory Provisions of the VCP

3. NECESSARY ACTION: a) Within six months from the date of these findings, the VCP must work with OCRM to complete a schedule for submission of amendments and changes to existing policy and core authorities for incorporation into the VCP. b) Within one year from the date of these findings, the VCP must identify and prioritize other policies and programs that should be incorporated into the VCP.

Public Outreach

4. PROGRAM SUGGESTION: The VCP should continue its efforts to maintain and increase program visibility through its outreach and other activities. In particular it should work with the planning district commissions, which serve as points of contact with coastal local governments, and which should work to acknowledge the role of the VCP. The VCP should also assure that all projects funded through the VCP acknowledge that role with appropriate signage or other written statements as appropriate.

II. INTRODUCTION

Section 312 of the Coastal Zone Management Act of 1972, as amended (CZMA), requires NOAA's Office of Ocean and Coastal Resource Management (OCRM) to conduct a continuing review of the performance of states and territories with federally approved coastal management programs. This document sets forth the evaluation findings of the Director of OCRM with respect to operation and management of the Virginia Coastal Resources Management Program (VCP) for the period from November 1999 through July 2003. It contains an executive summary of the review findings, a description of the review procedures, a description of the program, evaluation findings, major accomplishments during the review period, recommendations, a conclusion, and appendices.

The recommendations made by this evaluation appear in **bold** type and follow the section of the findings in which the facts relevant to the recommendation are discussed. The recommendations may be of two types:

Necessary Actions address programmatic requirements of the CZMA's implementing regulations and of the VCP approved by NOAA. These must be carried out by the date(s) specified;

Program Suggestions denote actions that OCRM believes would improve the program, but which are not mandatory at this time. If no dates are indicated, the State is expected to have considered these Program Suggestions by the time of the next CZMA §312 evaluation.

Failure to address Necessary Actions may result in a future finding of non-adherence and the invoking of interim sanctions, as specified in CZMA §312(c). Program Suggestions that must be reiterated in consecutive evaluations to address continuing problems may be elevated to Necessary Actions. The findings in this evaluation document will be considered by NOAA in making future financial award decisions relative to the Virginia Coastal Program.

III. REVIEW PROCEDURES

A. OVERVIEW

The Office of Ocean and Coastal Resource Management (OCRM) evaluation staff began its review of the VCP in May 2003. The §312 evaluation process involves four distinct components:

- An initial document review and identification of specific issues of concern;
- A site visit to Virginia, including interviews and a public meeting;
- Development of draft evaluation findings; and
- Preparation of the final evaluation findings, partly based on comments from the state regarding the content and timetables of necessary actions specified in the draft document.

B. DOCUMENT REVIEW AND ISSUE DEVELOPMENT

The evaluation team reviewed a wide variety of documents prior to the site visit, including: the federally-approved program document; approval findings; subsequent changes to the program; federal assistance awards; performance reports and work products; official correspondence between the program and OCRM; previous §312 evaluation findings; and other relevant information.

Based on this review and on discussions with the OCRM Coastal Programs Division (CPD) staff, the evaluation team identified the following priority issues:

- Program accomplishments, including changes to the core statutory and regulatory provisions of the VCP;
- The effectiveness of the State in implementing, monitoring, and enforcing the core authorities that form the legal basis for the VCP;
- Implementation of the Federal consistency process;
- The manner in which the VCP coordinates with other State, local, and Federal agencies and programs;

- Effectiveness of technical assistance, training, and outreach to local governments in order to further the goals of the VCP; and
- The State's response to the previous evaluation findings dated September 28, 2000.

C. SITE VISIT TO VIRGINIA

Notification of the scheduled evaluation was sent to the Department of Environmental Quality as the lead agency, relevant federal agencies, and the Virginia congressional delegation. The Virginia Coastal Program published notification of the evaluation and scheduled public meeting. In addition, a notice of NOAA's "Intent to Evaluate" was published in the *Federal Register* on June 25, 2003.

The site visit to Virginia was conducted from August 11 - 15, 2003. The evaluation team consisted of Christine McCay, Evaluation Team Leader, OCRM National Policy and Evaluation Division; Jennifer Winston, OCRM National Policy and Evaluation Division; Randy Schneider, Virginia Program Liaison, OCRM Coastal Programs Division; and Janis Helton, Coastal Planner, Alabama Area Coastal Management Program.

During the site visit, the evaluation team met with the coastal program manager and staff, Secretary of Natural Resources, Director of the Department of Environmental Quality (DEQ), the Director of the DEQ Division of Environmental Enhancement, other DEQ staff, representatives of federal, other state, and local governmental agencies, planning district commission members and staff, academicians, and interest group members involved with or affected by the VCP. Appendix A contains a listing of individuals contacted during this review.

As required by the CZMA, a public meeting was held on Monday, August 11, 2003, at 4:30 p.m. at the Department of Environmental Quality, 629 East Main Street, First Floor Conference Room, Richmond, Virginia, where members of the general public were given the opportunity to express their opinions about the overall operation and management of the VCP. Appendix B lists persons who attended the public meeting.

Written comments are also accepted. Appendix C contains responses to written comments received in response to the evaluation.

The VCP staff were crucial in setting up meetings and arranging logistics for the evaluation site visit. Their support is gratefully acknowledged.

IV. COASTAL PROGRAM AND COASTAL AREA DESCRIPTION

The Virginia Coastal Resources Management Program (VCP) was approved by the Office of Ocean and Coastal Resource Management (OCRM) in 1986. Using a “network” program management concept, the VCP uses existing state programs, agencies, regulations, and laws and a gubernatorial Executive Order that binds state agencies to its policies. Networking is a process for linking existing Commonwealth programs, agencies, and laws into a system that will ensure compliance of all state agencies to the policies of the VCP, thereby meeting federal requirements. Prior to 1993, the VCP was under the direction of the Virginia Council on the Environment. Since reorganization in 1993, the Virginia Department of Environmental Quality (DEQ) is the designated lead agency and is responsible for monitoring all state actions for consistency with the VCP. The central feature of the VCP is a core of nine existing regulatory programs which ensure that critical land and water uses in the coastal zone are subject to regulation by the Commonwealth. The core programs include:

- Fisheries management, administered by the Virginia Marine Resources Commission (VMRC) and the Department of Game and Inland Fisheries (DGIF);
- Subaqueous lands management, administered by the VMRC;
- Wetlands management, administered by the VMRC and the DEQ (since 2000);
- Dunes management, administered by the VMRC;
- Nonpoint source water pollution control, enforced by the Department of Conservation and Recreation;
- Point source water pollution control, implemented by the State Water Control Board (consolidated under DEQ as of April 1993);
- Shoreline sanitation, administered by the Department of Health;
- Air pollution control, implemented by the Air Pollution Control Board (consolidated under DEQ as of April 1993); and
- Coastal lands management, administered by the Chesapeake Bay Local Assistance Department.

The VCP also includes 25 statements in the program document and Executive Order, which set forth the goals of coastal management in Virginia, and various policies embodied in statute and regulations. The Executive Order is reaffirmed at the beginning of each new term by

the Office of the Governor. Executive Order Number 23, signed in 2002, condensed and streamlined the 25 goal statements into 10 goals.

Virginia's coastal zone encompasses 48 Tidewater counties, cities, and incorporated towns, and all of the waters therein, and out to the three-mile territorial sea boundary. This area includes all of the Commonwealth's Atlantic coast watershed, as well as parts of the Chesapeake Bay and Albemarle-Pamlico Sound drainage. Geographically, 29 percent of Virginia's land area lies within Tidewater Virginia. Over 60 percent of the Commonwealth's population lives in the coastal area. The Virginia shoreline along the four largest tidal rivers (Potomac, Rappahannock, York, James) and the Chesapeake Bay, into which they drain, along with the Atlantic Ocean, totals approximately 5,000 miles in length. Approximately 250,000 acres of tidal wetland form the biological base of productive nursery and spawning grounds, act as natural buffers against flooding and storm damage, and perform a role in water quality maintenance.

V. REVIEW FINDINGS, ACCOMPLISHMENTS, AND RECOMMENDATIONS

A. PROGRAM OPERATION AND COORDINATION

1. Organization and Administration

The Virginia Coastal Program is administered through the Department of Environmental Quality, the designated lead agency. There is a small but extremely knowledgeable and dedicated staff whose significant efforts are responsible for the many accomplishments of the program. Throughout the course of the site visit, almost every single person with whom the evaluation team met had nothing but praise for the staff. Several people told the team members that it was imperative that the state retain the VCP staff members at all costs, and if there were anything the evaluation team could do to make sure that happened, the team should do so. Such staff commitment, dedication, and respect are very difficult to quantify but are invaluable to the state and to coastal management and should be recognized. It should also be recognized that the VCP appears to have the full support of all levels of management at the Department of Environmental Quality and that its position in the DEQ is an excellent fit.

The strong financial management of the program by the VCP and the DEQ Administrative Division – in both cooperative agreement awards and grants to other entities – was specifically noted by OCRM staff and is acknowledged here. The financial and performance reports are always timely and well prepared. The performance reports submitted during the period covered by this evaluation were extremely helpful to the evaluation team.

The small number of staff, coupled with the very networked nature of the VCP and the lengthy coastline encompassed within Tidewater Virginia, require creativity, cooperation, and coordination to meet program goals and policies. Many of the following sections discuss how the staff and program have been able to do this. The agencies who implement enforceable policies of the VCP and other entities who help implement the program serve on a Coastal Policy Team (CPT). With the creation of the CPT there is a forum for resolving apparent conflicts in agency policies and activities and for working as a group to develop policy recommendations. As a result, there seems to be a greater sense of the relationship of each agency to the coastal program as a whole. The Virginia Coastal Program has a particularly close working relationship with the Chesapeake Bay National Estuarine Research Reserve-Virginia, which works hand-in-glove on many coastal projects. The VCP has developed a strong and mutually beneficial partnership with the eight coastal planning district commissions, who in turn serve to augment coastal program staff to provide technical assistance to their respective local governments. Technology also plays a significant role in helping the limited number of VCP staff conduct business. The coastal program's web site is extremely user-friendly, packed with an incredible amount of information and data, and is constantly updated and maintained. The staff developed a relational database for the annual grant awards and subgrants. The database has decreased the

amount of staff time that must be devoted to the day-to-day management of grant and subgrant contracts and performance and financial reports, allowing them to dedicate more time to planning, problem solving, and developing relationships to promote the goals of the program. All of these partnerships and mechanisms help to make the reach of the VCP greater than a limited number of staff can do on their own.

The VCP program and staff have been recognized nationally. The Virginia Oyster Heritage Program, discussed in greater detail in several sections that follow, was one of 99 semifinalists out of almost 1000 applicants for the *2002 Innovations in American Government Awards*. The awards program is a function of the Institute for Government Innovation at Harvard University's John F. Kennedy School of Government, which promotes excellence, innovation, and creativity in the public sector. The award recognizes outstanding programs that devise imaginative and effective ways to meet urgent social and economic challenges. The Virginia Oyster Heritage Program does that, but it is the VCP program and staff who initiated and coordinated the Program through their innovation and creativity.

ACCOMPLISHMENT: The Virginia Coastal Program benefits from a knowledgeable and dedicated staff who are highly respected by their peers and the citizens they serve. The staff is creative and adept at using technology and developing numerous partnerships to extend limited human and financial resources to meet priority goals and address coastal management issues.

2. Financial and Technical Assistance

In terms of its CZMA financial assistance awards, the VCP has sought to establish balance and focus in the expenditure of those funds. Some of the monies are used to support the administration of the VCP (primarily staff salaries, fringe benefits, and travel expenses). A modest sum (generally about \$25,000 per year) is awarded to each of the eight coastal planning district commissions to provide technical assistance to their local governments – in many cases this funds a portion of a staff position. The CPT allocates funds to maintain and support ongoing coastal resource management programs and projects in state and local agencies. However, to strike a balance between funding many smaller projects and fewer larger projects, the coastal program also concentrates its financial (and policy) efforts on a resource or special geographic region for a three-year period. The VCP's intent is to provide significant funding to a large program for three years to firmly establish the program, then move to another large investment in another focal area program. The first focal area from 1999-2001 was the Virginia Oyster Heritage Program. It continues today because of the strong financial and policy commitment from the VCP during that time. The second area chosen by the CPT is the current Virginia Seaside Heritage Program, which addresses management of the aquatic resources of the barrier islands, bays, and salt marshes along Virginia's Eastern Shore. Both of these larger projects are discussed in later sections. This decision to help smaller projects get started or continue while

funding larger, longer term projects to help bring about visible changes and success appears to be the right approach for the state – numerous partners in the larger projects and recipients of small grant funds indicated that they found this process beneficial to everyone.

ACCOMPLISHMENT: The VCP has established an appropriate balance for the state's needs between concentrating coastal management funds on one or two larger, long-term projects and funding numerous smaller projects to initiate or maintain them.

The VCP has established an organizational partnership with the eight coastal planning district commissions (PDCs). By providing financial assistance to these PDCs, the PDCs in turn offer targeted technical assistance to the 88 local governments within the coastal program boundaries – a vital task that the small coastal program staff would be unable to accomplish alone. The coastal PDCs serve as the regional points-of-contact for state and federal agencies to disseminate information and technical assistance to local governments and to collect information about local conditions and programs that may be useful to the state or federal agencies. Because the PDCs were created to address issues of greater than local concern, they are well positioned to focus on broader coastal management issues for their localities. Among other activities, the PDCs:

- coordinate local review of state and federal environmental impact assessments, pending state and federal environmental permits, and determinations of consistency;
- assist local governments with implementation of their environmental programs preparing and administering grant applications and requests for proposals, reviewing site plans and development proposals, preparing and assisting with updates to local codes and ordinances, and assisting with tributary strategy implementation; and
- provide basic planning technical assistance to their local governments by, for example, developing ground water protection ordinances, holding educational workshops, identifying potential access sites, and funding environmental inspectors to perform environmental site inspections.

The assistance is used to address issues of concern to the locality and in a manner appropriate to the locality. As noted in the next section, the planning district commissions are also an integral component in the coordination that is achieved among the networked partners comprising the Virginia Coastal Program.

ACCOMPLISHMENT: The VCP has established an ongoing, mutually beneficial, and supportive relationship with the eight coastal planning district commissions that receive funding to provide technical assistance, outreach, and education to the 88 local governments in the coastal zone. Such assistance could not be provided by the VCP staff alone. The planning district commissions serve as effective points of contact and coordination, and help pool resources among local governments, state, and federal agencies.

3. Programmatic Coordination

Within the networked program structure, the VCP staff in the Department of Environmental Quality must rely on other state agencies to help accomplish the goals and policies of both the National Coastal Zone Management Act and the Virginia Coastal Program. Virginia's network of natural resource agencies shares responsibility for implementing Virginia's coastal resources management laws and policies. As all coastal management programs do, the VCP addresses a broad set of issues ranging from wetlands protection to public access to sustainable economic development. A networked approach to coastal management requires coordination and communication to effectively conduct the business of the coastal program beyond the compartmentalized functions of each individual agency and to balance resource protection and economic development. Previous evaluation findings noted the compartmentalization of the VCP and the lack of overall program cohesiveness. The 1999 Evaluation Findings included a Program Suggestion recommending that the VCP create a staff level council and an executive level council to address coastal issues and act as a coordination mechanism.

Since the last evaluation, the VCP has created a Coastal Policy Team, whose members and alternates represent all of Virginia's coastal program partners: the departments of Environmental Quality, Conservation and Recreation, Game and Inland Fisheries, Health, Agriculture and Consumer Services, Forestry, Historic Resources, and Transportation; Marine Resources Commission; Chesapeake Bay Local Assistance Department; planning district commissions; Virginia Institute of Marine Science; and the Virginia Economic Development Partnership. The Coastal Policy Team (CPT or Team) facilitates cooperation among these agencies and provides a forum for discussion of cross-cutting coastal resource management issues. Members serve on the team at the discretion of their agency director.

The functions of the Team are to:

- identify coastal policy issues that cut across agency jurisdictions and develop policy recommendations;
- guide a biennial review process that includes the development of measures or indicators to analyze the effectiveness of Virginia's Coastal Program and the

- production of a “State of the Coast Report,” describing the current health and status of coastal resources; and
- make funding recommendations to the DEQ Director for coastal management projects.

The evaluation team met with members of the CPT throughout the week and came away with the sense that the purpose and functions of the Team are being well met. There appears to be good and ongoing communication among the agencies, which helps focus individual agency efforts toward common coastal program goals, provides a sense of connectivity, and facilitates the early identification of potential problems or agency conflicts. For example, the CPT has been addressing use conflicts inherent between the preservation or increase in submerged aquatic vegetation and aquaculture efforts. The creation of an entity to provide a formal mechanism for networking seems to have bolstered informal networking among agency staffs as well.

The Team has been successful at allocating funds to address priority issues and needs and to maintain and support ongoing coastal resource management programs and projects in state and local agencies. It has also been successful in directing a larger portion of the funding to make significant advancement in one issue or area by identifying a focal area in which funding and policy efforts will be concentrated for a three-year period. For example, following the VCP’s three-year emphasis on the Virginia Oyster Heritage Program (restoration of oyster reefs), the Team has now identified and is implementing the Virginia Seaside Heritage Program (management of aquatic resources of the barrier islands, bays, and salt marshes along Virginia’s Eastern Shore).

If there is a potential weak link in the effectiveness of the Coastal Policy Team, it may be the lack of a formal mechanism for communicating information and coastal policy recommendations from the Team to the Secretary of Natural Resources. The Secretary is the primary person to make policy recommendations, suggestions, or requests to the governor and legislature on behalf of the VCP. Although the evaluation team was not aware of a specific issue or problem that has arisen, it appears that a very informal transmission is the only way the Secretary currently is briefed or asked to provide support or guidance. It is quite likely that a situation or recommendation will arise where the VCP networked agencies may wish to indicate a strong joint position, where the recommendation should be unambiguous, or where there should simply be a record of a decision made by the Team so it can be implemented without question or delay. The VCP and the Team should consider a mechanism whereby Team members take the Team’s policy recommendation to their respective agency heads. The agency heads could, in turn, co-sign a brief written document that could be sent to the Secretary as appropriate.

ACCOMPLISHMENT: Creation of the Coastal Policy Team has provided a valuable mechanism to facilitate communication and cooperation, strengthen the common identity of the network of coastal agencies and partners, focus individual agency efforts towards coastal program goals, reach consensus on priorities and issues, and devise successful funding strategies for the VCP.

PROGRAM SUGGESTION: The VCP and the Coastal Policy Team should consider developing a formal mechanism for communicating policy recommendations, suggestions, requests, or other information through departmental agency heads to the Secretary of Natural Resources.

Beyond formal networked agency coordination, the staff of the VCP is adept at developing and maintaining partnerships with a variety of planning district commissions, local governments, and non-governmental organizations. Such partnerships are mutually beneficial and clearly supplement and enhance the small number of VCP staff. It was evident during the week-long evaluation that many of the partnerships have been nourished for years and that it is now ‘second nature’ for the VCP staff to call on a partner in a variety of situations, and vice versa. Such is the case with representatives from all eight coastal planning district commissions who met with the evaluation team and expressed both pleasure and satisfaction with the ability and responsibility of working with their local governments and the VCP.

Another example is the Virginia Oyster Heritage Program, which involves not only approximately 17 state and federal agencies, but numerous private organizations, including but not limited to the Watermen of Virginia, the Chesapeake Bay Foundation, the Virginia Seafood Council, and the Virginia Environmental Endowment. For the VCP, “programmatic coordination” is not limited to networked state agencies. The strength of the VCP staff is its ability to identify and involve a wide range of interest groups who can supplement the capabilities and responsibilities of more traditional entities and agencies. Throughout the site visit, the evaluation team was impressed with the number of groups and people who had become involved in specific coastal management issues or projects at the invitation of the VCP staff.

ACCOMPLISHMENT: One of the Virginia Coastal Program’s strengths is the staff’s ability to partner with and involve many groups in the VCP’s initiatives and projects. This enables the VCP to accomplish more than would be possible with the small staff in the VCP-DEQ office and with traditional agency and government partners. It is also an effective way to promote the Virginia Coastal Program.

4. Program Effectiveness and Assessment

The Virginia Coastal Program was originally established by and is reauthorized by gubernatorial executive order issued every four years. Prior to the most recent executive order signed by Governor Mark Warner in June 2002, the earlier orders identified 25 goals and objectives of the VCP. For a time before June 2002, the Coastal Policy Team, with assistance from the Virginia Institute of Marine Science, assessed the 25 goals and objectives, some of which were conflicting. The conclusion of this effort was that these were condensed and streamlined into ten compatible coastal program goals. The June 2002 executive order includes these ten goals of the VCP and directs all state agencies to carry out their legally established duties consistent with the VCP and in a manner that promotes coordination among all government agencies. The executive order also prescribes a conflict resolution process that directs DEQ, as the lead coastal agency, to monitor all state actions affecting Virginia's coastal resources and to resolve any inconsistencies with the VCP goals.

The goals will provide the outline for reporting on VCP accomplishments and become the basis for choosing coastal indicators. The VCP has begun working with the Coastal Policy Team to develop a performance measurement system for the state program. The Coastal Policy Team developed a list of draft indicators that VCP staff are coordinating with the ten goals. The Virginia Coastal Program intends for its performance management system to look at both process and outcome indicators to track progress toward achieving the ten coastal management goals. Data collected on performance indicators will be used to document trends and will be published in the VCP's State of the Coast report, which will be produced every two years.

The VCP staff are working closely with the programs and agencies in the state that are also developing performance measurement systems to assure coordination, since the VCP will rely on its networked agencies to report data on its indicators. The staff are also aware of the efforts by NOAA to work with the coastal states to develop a national performance indicator system in anticipation of requirements for those that will likely be in place in the reauthorization of the CZMA. From efforts begun so far with regard to streamlining the state coastal program goals and developing some performance indicators, the VCP staff is also reviewing and considering the draft indicators being developed nationally, and it appears that the state system will correspond and correlate well with a national system.

ACCOMPLISHMENT: The Virginia Coastal Program has begun an excellent effort to clearly identify coastal goals and objectives and develop a performance indicator system to identify successes and measure progress toward meeting the goals of the program.

PROGRAM SUGGESTION: The VCP is encouraged to continue its work on a state coastal management performance indicator system and, to the extent possible, to closely align its efforts with the work toward a national coastal management indicator system being conducted by NOAA. The state is urged to participate in and comment on the work of NOAA and state participants in the development of a national performance indicator system and to share the VCP's experiences in its system development efforts with other states.

B. NATURAL RESOURCE PROTECTION

During the period covered by this evaluation the Virginia Coastal Program has been involved in a number of initiatives to address natural resource protection. In several cases, these projects and initiatives address multiple issues and are also mentioned and discussed in later sections of these findings. For example, the Virginia Oyster Heritage Program is discussed here under “Natural Resource Protection,” but it also has a focus on water quality and on the economic benefit from the reestablishment of oyster reefs (aquaculture) and is mentioned under those sections as well.

Virginia Oyster Heritage Program

According to information from the VCP, at the peak of Virginia’s oyster harvesting in the early 1900’s, annual catches exceeded 9 million bushels. Total landings for the 1997/98 season were just slightly over 14,000 bushels. Disease, pollution, and harvesting are responsible for the drastic drop, and Virginia’s coastal ecosystems and economy have suffered from the loss of habitat, water quality and economic benefits usually associated with thriving oyster populations.

Since 1993 the Virginia Marine Resources Commission has been working with various partners to construct three-dimensional reefs in several rivers and the seaside and stock many of them with disease-tolerant oysters. In 1999 the VCP and the Marine Resources Commission launched the Virginia Oyster Heritage Program to build on the earlier successful efforts and to involve more partners in reef restoration, seek increased financial resources for reef construction, and take a new approach to reef construction – establish three-dimensional reefs surrounded by enhanced harvest areas. The VOHP was the first focal area chosen by the coastal program to receive significant funding over an extended period of time.

The VOHP has four elements and goals:

- build oyster broodstock sanctuary reefs (three-dimensional reefs [6-8 feet tall over approximately one acre] that cannot be harvested);
- create sustainable harvest areas (a 6-10 inch deep layer of shell spread over approximately 25 acres near the broodstock reef to catch spatfall from the broodstock reef for harvesting);
- monitor water quality and habitat improvements to determine success of reefs in increasing oysters, water clarity, and biodiversity;
- provide information and education on the importance of oyster restoration, including training and use of volunteers for reef restocking efforts.

Partners in the VOHP include state and federal organizations as well as non-profit groups and commercial and recreational interests. During the three to four years of focused resources and attention from the partnership, about 25 sanctuary reefs and hundreds of acres of harvest areas have been constructed at a cost of about \$10 million. (According to figures from the VCP, each reef site costs an average of almost \$400,000 to construct.) Recognizing that federal and

state funds alone would never be sufficient to fund the program, the non-profit Virginia Oyster Reef Heritage Foundation was established to accept donations from business and private citizens and to serve as a repository of private funds needed to match challenge and public agency grants.

ACCOMPLISHMENT: The Virginia Oyster Heritage Program has proven to be an innovative and effective approach to focusing the financial resources and efforts of a partnership of governmental and non-governmental agencies and groups to support and advance oyster reef restoration efforts and the natural resource, water quality, and economic benefits that restoration brings. It has also provided very meaningful visibility for the Virginia Coastal Program.

Virginia Seaside Heritage Program

The second large focal area initiative begun during this evaluation period is the Virginia Seaside Heritage Program. Like the Oyster Heritage Program, the Seaside Heritage Program addresses several issues, including faunal and habitat restoration, management of aquatic resources, aquaculture, and recreation/ecotourism enhancement. The Seaside Program focuses on Virginia's Eastern Shore – the Atlantic Ocean watershed out to the 3-mile territorial sea boundary on the Virginia portion of the Delmarva Peninsula. The area has been designated by the United Nations as a "Man and the Biosphere Reserve." However, the once overwhelming quantities of waterfowl, shorebirds, underwater grasses, oysters, scallops, and finfish have declined since the early 1900s and have not rebounded despite conservation efforts over the last few decades.

The Seaside Program addresses management of aquatic resources of the barrier islands, bays, and saltmarshes along the shore. The VCP and its partners in this program began work in the fall of 2002 and are aiming their efforts at restoration, use-conflict resolution, natural resource protection, and sustainable economic development (such as ecotourism and aquaculture). Partners include the Virginia departments of Conservation and Recreation, Game and Inland Fisheries, and Transportation; the Marine Resources Commission, the Virginia Museum of Natural History, the Accomack-Northampton Planning District Commission, several local governments, the Army Corps of Engineers, the U.S. Fish & Wildlife Service, two national wildlife refuges, the Nature Conservancy, Cherrystone Aquafarms, the Chesapeake Bay National Estuarine Research Reserve-Virginia, the University of Virginia, and the College of William and Mary's Center for Conservation Biology and Virginia Institute of Marine Science (VIMS).

During the first year of focused attention and monies, activities centered around development of a comprehensive GIS inventory of natural resources and human use patterns; restoration of underwater grasses, scallops, oyster reefs, marshes, and shorebird habitats; development of management tools such as a use suitability model, improved enforcement capabilities, and public education efforts; and development of sustainable ecotourism

opportunities. Eleven separate program elements were funded with CZMA dollars as grant tasks and conducted by almost as many Seaside Program partners. For example, VIMS worked to develop an ecotour guide certification course; VIMS has also done seagrass planting; the Accomack-Northampton Planning District Commission received funds to make improvements to public access sites along the coastal loop of a new, self-guiding birding and wildlife trail; and the Department of Conservation and Recreation and the Nature Conservancy used grant funds to detail the extent of *Phragmites* invasion into marshes and to begin efforts to eliminate it from locations where it threatens rare marsh species or relatively pristine marshes.

The Maryland Coastal Bays Program, officially established by the U.S. Environmental Protection Agency in 1996 and now a nonprofit organization, is geographically located on Maryland's Eastern Shore immediately north of the Virginia Eastern Shore. It receives strong supported from the Maryland Coastal Management Program. The Coastal Bays Program has addressed and continues to address many of the same or similar issues as those being identified and addressed by the Seaside Heritage Program. The VCP might consider the potential benefits of collaboration and sharing of information and experiences with the Coastal Bays Program.

This VCP model of concentrated coastal resource management effort and significant funding through a public-private partnership over three or more years seems to work well for Virginia, as evidenced by the Virginia Oyster Heritage Program; the Seaside Heritage Program has also maintained the same high level of partnership, participation, and success through its first year.

ACCOMPLISHMENT: The Virginia Seaside Heritage Program has identified a significant number of public and private partners, outlined attainable goals, and during its first year has conducted numerous projects aimed at the preservation and restoration of natural resources. The Program is the second focal area in a model of concentrated coastal resource management effort and significant funding that appears to be successful for the state.

Nontidal Wetlands

Wetland protection, particularly for nontidal wetlands, was a concern raised in the Final Findings dated September 2000 (covering the period from May 1996 through November 1999). Issuance of tidal wetlands permits is the responsibility of the Virginia Marine Resources Commission under Chapters 12 and 13 of Title 28.2 of the Code of Virginia. Chapter 12 activities may require a separate Virginia Water Protection permit (issued by the Department of Environmental Quality); Chapter 13 activities only require a separate Virginia Water Protection permit if Clean Water Act Section 401 certification is required. Thus, DEQ provides Section 401 certification by issuance of a Virginia Water Protection permit.

The Virginia Water Protection Permit Program was established in 1992 to serve as the state's nontidal wetlands program and the Section 401 certification process. Protection of, and impacts to, nontidal wetlands were previously addressed only when a federal permit was required under Section 404 of the Clean Water Act: a Virginia Water Protection permit was then required as a mechanism to provide Section 401 water quality certification. In 2000, however, the Virginia General Assembly removed the dependence of the state's nontidal wetlands program on the issuance of a federal permit and established an independent Nontidal Wetlands Program at DEQ, so that DEQ now uses the Virginia Water Protection Permit Program to regulate activities in wetlands. Some additional activities, such as certain types of excavation in wetlands and fill in isolated wetlands, were added to the activities already regulated through the Section 401 certification process.

This increased protection for wetlands is a positive step in Virginia's coastal resource management efforts and goes beyond addressing the Program Suggestion included in the 2000 Final Findings regarding nontidal wetlands. The next step is to incorporate the Nontidal Wetlands Program into the VCP.

ACCOMPLISHMENT: The VCP has addressed the importance of nontidal wetlands in the Commonwealth through legislation that established an independent nontidal wetlands program at DEQ with revisions to the permit program. This has increased the protection provided to these wetlands through changes to the existing permitting program.

Special Area Management Planning

The VCP has been using the special area management planning (SAMP) tool for over 10 years to address areas where significant coastal resources are being severely affected by cumulative and secondary development. The Northampton County SAMP was the first to be initiated by the VCP in 1991-92. The County is a key neotropical migratory bird stopover area; the County's dunes, maritime forests, and scrub-shrub habitats along the perimeter of the County and especially at the southern tip provide critical habitat to declining numbers of songbirds. However, it is a relatively impoverished, rural locality seeking economic development and also facing rapid growth and development pressures because of its proximity to Virginia Beach and Norfolk. A focus of the Northampton SAMP has been to promote ecotourism while also encouraging natural resource protection. The Eastern Shore Birding Festival was initiated in 1993 and has continued yearly (including during the time period covered by this evaluation), bringing in hundreds of thousands of dollars to the community, while educating residents and visitors about the resources of the Eastern Shore. The County was chosen by President Clinton's Council on Sustainable Development for a model eco-industrial park, and construction of the solar-powered Port of Cape Charles Sustainable Technologies Industrial Park is complete.

Funding closed out in 1999, but there was renewed interest to continue work not completed before then. During the time covered by this evaluation period, the VCP has again provided funding and assistance to Northampton County and the SAMP effort in an attempt to address the critical environmental ordinance portion of the original work not completed during the first effort. A citizen advisory committee has developed recommendations and a draft ordinance for a Sensitive Natural Resource District Area. If adopted by the County, the ordinance will focus on protecting groundwater recharge areas and drinking water quality, as well as the County's remaining natural habitat communities around the shoreline. [After the site visit and during the preparation of these findings, the County chose not to adopt the ordinance. The VCP is urged to continue exploring opportunities with the County to address the outstanding issues.]

The Southern Watersheds SAMP began in 1996. It was designed to protect and enhance water quality, natural resources, and the rural character of the watersheds in the southern portion of the intensely developed cities of Chesapeake and Virginia Beach. This area contains some of the most diverse and extensive wind-driven tidal and nontidal wetlands in the state, 19 rare community types, and is home to over 40 rare or endangered species. During the period covered by this evaluation, a Multiple Benefits Conservation Plan was developed and approved by all the SAMP partners. The Plan identifies a corridor of critical lands for protection that will offset development impacts outside the corridor and links the mitigation sites to existing protected lands in the corridor. A Rural Area Preservation Program outlines a strategy to protect the agricultural and natural areas in the Southern Watersheds Area as residential development takes place. And a North Landing River Water Use Management Memorandum of Agreement was executed by the cities of Virginia Beach and Chesapeake, the Hampton Roads Planning District Commission, and other state and federal agencies in 2000 to enhance education on boating and ecological stewardship issues on the river. It also includes a water use plan map of voluntary designated use areas to minimize conflict between the diverse recreational and commercial users of the river.

Initial work began on the Dragon Run SAMP in 1986, but efforts have intensified in the last several years. The Dragon Run is a fresh and brackish water stream flowing through the Virginia Middle Peninsula, with a watershed encompassing 140 square miles. Its watershed is nationally recognized as nearly pristine and a uniquely functioning eco-region of high biodiversity. The watershed is largely undeveloped, with farming and forestry as its primary land uses. Unplanned, unsustainable development threaten the area, so the SAMP is being put in place before significant environmental damage occurs. The overarching goal is to preserve the watershed's natural resources, property rights, and traditional uses. During the time period of this evaluation, coastal program funding was used to purchase a 121-acre tract; the Nature Conservancy purchased 452 acres adjacent to the coastal program site, while the Friends of Dragon Run hold fee simple ownership and easements on 360 acres. The VCP acquisition piece will be incorporated into the Virginia Estuarine and Coastal Research Reserve System and will be managed by VIMS in coordination with the Chesapeake Bay NERR-VA program. The Dragon Run SAMP Advisory Group, Steering Group, and three topic area work groups have

developed a series of goals and objectives for the Dragon Run and are developing action plans to achieve these.

The VCP has invested considerable time, effort, and funding into the SAMP process and the three existing SAMPs. Because of this sustained commitment, the state as well as the multiple jurisdictions involved in the three SAMPs have seen benefits to the resources as well as to the citizens living in the areas.

ACCOMPLISHMENT: The VCP has sustained a long-term commitment to the SAMP process and to the program's active SAMPs. The coastal environment and the citizens of Virginia are the beneficiaries of this effort.

C. HAZARDS

Dunes are an important natural resource in their own right but are also a significant line of defense when hurricanes and other coastal storms strike. Virginia formally recognized the importance of its dune systems in 1980 with passage of the Coastal Primary Sand Dunes and Beaches Act. However, the Act does not address secondary and riverine dunes (those that do not meet the regulatory definition of a primary dune) and dunes and beaches that are not located within the nine coastal jurisdictions covered by the Act. Some of the “non-primary” dunes are afforded some protection if they fall within the 100-foot Resource Protection Area Buffer required by the Chesapeake Bay Preservation Act, but there is still a regulatory gap in protecting dune and beach systems outside the Coastal Primary Sand Dunes and Beaches Act. Locating and characterizing the remaining dunes in the Chesapeake Bay is critical to coastal hazards planning and sound resource management.

In recognition of this issue, the VCP's Year 2001 Section 309 Coastal Assessment and Strategy placed high priority on hazards and proposed a dune management strategy. Even before that, however, the VCP has been involved in a collaborative effort with the Virginia Institute of Marine Science (VIMS) that began in 1998 to improve knowledge of the state's dune systems and to evaluate protection of dunes. A series of projects have received almost \$450,000 in VCP funding since then and will continue beyond the time frame of this current evaluation. The first project completed by VIMS resulted in the publication of “Chesapeake Bay Dune Systems: Evolution and Status” in 2001. The report is an inventory of primary and secondary dunes on the Chesapeake Bay shoreline within the nine jurisdictions included in the Coastal Primary Sand Dunes and Beaches Act. Recognizing the regulatory gap, a second study was undertaken by VIMS with coastal program funding and focused on expanding the inventory to another eight coastal jurisdictions. Another VIMS study looked at upland development patterns contiguous to critical dunes systems and has resulted in a risk assessment that defines the secondary dunes at risk of disturbance or loss due to development and narrows the field to those not in government or conservation ownership, those very remote or physically inaccessible, those already seriously

impacted by development, and those of minimal ecological and coastal hazard value because of their small size and landscape position.

The Coastal Policy Team members have already begun to consider some preliminary recommendations for improved dune and beach management, which could include modifications to the Coastal Primary Sand Dunes and Beaches Act, increased education of shoreland owners, some expansion of the use of some provisions in the Chesapeake Bay Preservation Act regulations to provide further protection, and possible acquisition or use of conservation easements at some dune system sites. Work will continue beyond the time period covered by this evaluation to provide models and analyses as a basis for Coastal Policy Team recommendations.

ACCOMPLISHMENT: The VCP and Coastal Policy Team recognized and have begun to address the need for additional information about, analysis of, and protection mechanisms for dune and beach systems not protected by existing laws and regulations.

D. WATER QUALITY

The state and the VCP address water quality issues in a variety of ways. The Commonwealth is a partner in the Chesapeake Bay Program and was a signatory to both the Chesapeake Bay Agreement of 1983 and the Chesapeake 2000 Agreement. Improving the water quality of Chesapeake Bay is a critical component of both agreements and the overall program, and the state has committed to a variety of actions and strategies to improve water quality.

The Coastal Nonpoint Pollution Control Program (nonpoint program) created by Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 is one of the major mechanisms by which the VCP has had an effect on water quality throughout Virginia's coastal zone. Virginia's nonpoint program document was submitted to NOAA and EPA in September 1995, and received conditional approval in February 1998. The state can be proud that its nonpoint program was one of the first six to receive full federal approval – in Virginia's case, on May 16, 2001. The DEQ and the Department of Conservation and Recreation (DCR), the state's agency administering Section 319 of the Clean Water Act, have an excellent relationship in terms of the two nonpoint programs. Both the DCR nonpoint staff and the VCP staff have regularly and actively participated nationally on policy issues and workgroups. The Section 6217 nonpoint program and the Section 319 nonpoint program have been integrated; the actions presented in the DCR Section 319 document generally function as implementation mechanisms for the coastal nonpoint program. In sum, the state has been a leader in developing and implementing its nonpoint program and has been highly effective at coordinating among agencies to wisely use limited nonpoint program implementation funds.

A number of projects addressing aspects of particular concern to Virginia have been funded through the nonpoint program during the period covered by this evaluation, including, but

not limited to: the Middle Peninsula Planning District Commission's on-site technical guidance program, which supports the maintenance and expansion of an onsite wastewater revolving loan and grant program for portions of the Rappahannock and York rivers watersheds; a project to enable the Virginia Department of Health to better identify the location of onsite wastewater system impacts and to implement corrective measures resulting in reduced nutrient and fecal coliform levels; the development of a GIS database in support of Virginia's shellfish sanitation program; and a study to develop an accurate, comprehensive database for dams in the Tidewater region and to contribute to the evaluation of potential habitat degradation below these existing dams.

The VCP has also developed and is implementing a Clean Marina Program, which is a voluntary initiative designed to help, support, and give special recognition to marinas that implement best management practices that go above and beyond basic regulatory requirements. There are approximately 1,000 marinas in the state, all of which can affect water quality in a variety of ways. The VCP network of agencies, Virginia Sea Grant, the marine trade industry, marina associations, recreational boaters, and charter marinas are all collaborating to provide pollution prevention guidance and on-site technical assistance. At the time of the evaluation site visit, approximately 15 marinas had been certified/designated as clean marinas and an equal number have pledged to work toward designation.

The Virginia Oyster Heritage Program is also an integral component of Virginia's efforts to improve water quality. Oysters are extremely effective water purifiers, and that action has a positive cascading effect. By filtering algae and sediments, water clarity is increased, light penetration is improved, seagrass beds can flourish and expand, and habitat and feeding grounds for many species of fish and birds are provided. The program is discussed in greater detail in a following section, but by the time of the evaluation site visit, approximately 65 oyster "sanctuary" reefs with surrounding harvest areas had been created. Although the filtering effect of newly introduced oysters may play a relatively modest role in the overall improvement of coastal water quality, it is, nevertheless, a factor that the VCP and its partners have not overlooked.

ACCOMPLISHMENT: The state has been a leader in the development and implementation of the coastal nonpoint pollution control program, has been effective at coordinating among agencies to wisely use limited nonpoint program implementation funds, and has established a capable working partnership among all entities involved in water quality issues.

E. PUBLIC ACCESS

Public access has been successfully integrated into a wide range of projects and activities supported by the VCP. As part of the Virginia Seaside Heritage Program, Northampton County

began the process of converting a seaside landfill to a new park that includes public access to coastal waters. The VCP funded construction of the first nature trail on the property, through the climax forest to the saltwater marsh. This waterfront park and trail will be a link in the larger Seaside Heritage Program's Water Trail. The Seaside Water Trail, which follows the 70-mile shoreline of Virginia's Eastern Shore from Kiptopeke to Chincoteague, will provide a link from Eastern Shore National Wildlife Refuge to Chincoteague National Wildlife Refuge.

The Seaside Heritage Program has made and will continue to make improvements to public access sites along the coastal/seaside portion of the Commonwealth's new, self-guided Birding and Wildlife Trail. The VCP provided some funding for development of the coastal phase of the Trail, which was dedicated and opened in October 2002.

The VCP provided funding for the Great Wicomico Public Fishing Pier in Northumberland County. At the request of the county, the Northern Neck Planning District Commission, using a grant from the VCP, evaluated three potential access sites for the pier; the VCP then awarded a grant to the county to construct the fishing pier. The pier was constructed and opened in 2001.

The VCP has also been involved in land acquisition for public access in the Dragon Run. Coastal funds were used to purchase a 121-acre tract along the Dragon Run in King and Queen County. The property has been incorporated into the Virginia Estuarine and Coastal Research Reserve System and has managed access for research and supervised education programs. At the time of the evaluation site visit, the VCP was involved in the purchase of a 274-acre tract in both Essex and King and Queen counties as part of the Dragon Run SAMP. Since the site visit, purchase of the tract was completed. The VCP provided funds to the Middle Peninsula Chesapeake Bay Public Access Authority, which completed the purchase and now holds title to the property. A public access plan is being drafted at the time of these findings.

The Middle Peninsula Chesapeake Bay Public Access Authority (Authority) is a special purpose body created by the Virginia General Assembly to specifically deal with the regional issue of providing and protecting public access to the water. Through the Coastal Technical Assistance Program, the Middle Peninsula Planning District Commission (MP-PDC) was able to address this issue and create this solution. Until other funds for permanent staff support are found, support to the Authority is and will be provided by the staff member at the MD-PDC as one of the tasks in the VCP technical assistance grant to the MD-PDC. The VCP's involvement in the creation of the Authority, the provision of some staff support, and the provision of funding for the Authority's first acquisition have created tremendous interest in the Authority and given it a boost in terms of local support.

ACCOMPLISHMENT: The VCP has shown a strong, ongoing commitment to supporting public access. It does so throughout many of its programs and projects for which it provides financial and technical assistance.

F. FEDERAL CONSISTENCY, PERMITTING, AND CHANGES TO THE STATUTORY AND REGULATORY PROVISIONS OF THE VCP

Virginia's federal consistency review is administered by the Department of Environmental Quality's Office of Environmental Impact Review (OEIR or office) with a staff of four professionals, in cooperation with the state agencies responsible for the enforceable and advisory policies of the Virginia Coastal Program. The OEIR staff also perform environmental impact reviews of state and federal projects, but consistency reviews require a significant portion of the staff's time. In general, available data suggests that the VCP and the OEIR average approximately 140-150 federal consistency reviews annually. The OEIR has published a one-page Federal Consistency Fact Sheet and a trifold pamphlet containing general information about the various review processes, including federal consistency, that the office conducts.

After NOAA revised its federal consistency regulations in 2000, the VCP and OEIR undertook an update of the state's federal consistency manual. The result was a comprehensive "Federal Consistency Information Package" completed in late 2000. It was distributed at the Coastal Partners Workshop in December 2001 during a half-day federal consistency workshop on revised federal consistency regulations and Virginia's review procedure. Over 75 representatives of federal, state, and local government agencies participated in the workshop.

The Office of Environmental Impact Review's web page is easily accessed from the VCP website. The Federal Consistency Information Package can be viewed on-line and can be printed as well. Once there, a menu bar button accesses a list of all projects currently undergoing review (NEPA, federal consistency, or state environmental impact); the list includes project number, project name, sponsoring agency, deadline for comments to DEQ, and the OEIR staff project contact. Clicking on the project number provides a link to a description for that project. There is also a menu bar button for "public notices" that identifies the projects undergoing federal consistency review and provides a direct link to the public notice for each project, which in turn allows a person to comment on the project electronically to a contact whose e-mail address is linked in the public notice. The posting of public notices is updated weekly. Internally, the OEIR maintains a "state, federal, and federal consistency project review" database that allows the staff to track project review progress, deadlines, and comments received.

As enforceable policies are amended by the general assembly or otherwise revised, they may not be used for federal consistency review until the amendments and revisions have been incorporated into the VCP. The Chesapeake Bay Preservation Act, administered by the Chesapeake Bay Local Assistance Department was officially incorporated into the VCP in May, 2000, and federal consistency provisions are now applicable. However, there have been other amendments to the core enforceable policies during this evaluation period, and these changes have not yet been submitted to NOAA for approval and incorporation into the VCP. It is important that these policy revisions be incorporated and that the VCP maintain a schedule of regular submission of revisions and amendments as they occur. There are also other policies,

laws, and programs that have been enacted since original program approval that should be considered for incorporation into the VCP.

NECESSARY ACTION: a) Within six months from the date of these findings, the VCP must work with OCRM to complete a schedule for submission of amendments and changes to existing policy and core authorities for incorporation into the VCP. b) Within one year from the date of these findings, the VCP must identify and prioritize other policies and programs that should be incorporated into the VCP.

G. PUBLIC OUTREACH

The Virginia Coastal Program has developed an effective program of public outreach and education using a variety of mechanisms. Rather than carry out education and outreach activities as an isolated program, almost all projects and programs conducted by the VCP have an educational/outreach element. Perhaps the most impressive of the outreach and education tools is the VCP's website. The site is very user-friendly, easily navigated, has numerous links to related sites, and is populated with an incredible amount of data and information. It is frequently updated and maintained. Citizens and interested parties can access a great variety of materials and information, including but not limited to:

- Funding [the VCP (sub)grant proposal application, grant reporting forms, and project lists and summaries from 1992 to the present];
- Federal consistency [including a complete information package, database of projects currently undergoing consistency review; links to allow the public to provide comments on each project];
- Program administration [Executive Order authorizing program; laws and policies; goals and objectives; program boundaries/management area];
- Calendar, coastal program publications (including links to complete documents, such as the biennial State of the Coast Report), VCP magazine;
- Project information about the Clean Marina Program, Virginia Seaside Heritage Program, Virginia Oyster Heritage Program.

In 2002 the VCP's twice-yearly magazine, *Virginia Coastal Management*, replaced the quarterly newsletter. The magazine has a professional appearance, is very readable, and is filled with timely information and news about the VCP, its partners, projects, coastal zone, and coastal resources.

As noted above, many of the VCP's initiatives have a specific educational component. For example, the Virginia Oyster Heritage Program provides educational materials on the oyster restoration effort (much geared to children), trains and uses volunteers for reef restocking efforts, and has a traveling exhibit that includes a tank with live oysters and other marine life and two filter demonstration tanks to show the oysters' ability to filter algae out of the water. VCP staff

traveled with the exhibit to over 40 events throughout the state in a three-year period. The Virginia Seaside Heritage Program (VSHP) focuses its direct public education efforts on publications, web sites, and field trips. A Seaside Heritage Program Conference is planned for sometime near the end of the funding period. The VSHP also includes a “secondary” or indirect education effort through the development of sustainable ecotourism opportunities by constructing or enhancing public access sites, creating a canoe/kayak water trail, and offering an ecotour guide certification course. The three special area management planning efforts (Northampton County SAMP, Southern Watersheds SAMP, and Dragon Run SAMP) include an educational component geared to the resources, the development issues, and the dynamics of the communities in each SAMP. And the Virginia Clean Marina Program has a significant educational component, providing pollution prevention guidance and technical assistance not only to marinas and local governments, but to recreational boaters as well.

ACCOMPLISHMENT: The VCP has an effective, well integrated suite of outreach and education tools, including an impressive website that is well populated and well maintained and a very informative and readable coastal magazine.

One of the aspects of a networked program that is often difficult to overcome is the issue of program visibility. The VCP is not alone among state coastal management programs in its struggle to partner and coordinate with a wide variety of entities and still be recognized as a separate, contributing program. Many of its outreach and education activities rightly credit and make visible the role the VCP plays in the management of Virginia’s coastal resources. The evaluation team noted two areas, however, where greater credit and visibility should rightly be acknowledged.

All eight coastal planning district commissions (PDCs) receive annual funding from the VCP to provide technical assistance to the local governments within each respective PDC. Representatives from the eight PDCs with whom the evaluation team met were all very aware of the role the VCP plays in providing that funding and in coastal management efforts in Virginia. They agreed, however, that most of the local governments receiving technical assistance are probably only minimally aware of the role the VCP has played, and that the citizens in the local jurisdictions are probably completely unaware the VCP has made such assistance possible. This represents a great ‘missed opportunity’ to establish the VCP’s visibility and broaden its constituent support base. Even the PDC websites vary in terms of acknowledging the role of the VCP in materials on the websites and in providing direct links to the VCP website.

Another ‘missed opportunity’ involves signage posted at various projects. Some of the project sites the evaluation team visited did not have signs with the Virginia Coastal Program logo or an acknowledgment of the VCP’s involvement. In most if not all cases, the contractual obligations for the funding does or should require such acknowledgment.

PROGRAM SUGGESTION: The VCP should continue its efforts to maintain and increase program visibility through its outreach and other activities. In particular it should work with the planning district commissions, which serve as points of contact with coastal local governments, and which should work to acknowledge the role of the VCP. The VCP should also assure that all projects funded through the VCP acknowledge that role with appropriate signage or other written statements as appropriate.

H. AQUACULTURE

The majority of aquaculture activities conducted in Virginia involve oysters and clams. Both the 1997 and the 2001 Coastal Needs Assessment and Strategy reports completed pursuant to Section 309 of the CZMA ranked aquaculture as a high priority area for the state. Virginia and the VCP have taken significant steps to support and advance aquaculture in the coastal zone with both Section 306 and Section 309 funds and with other federal, state, and non-governmental monies as well.

The Virginia Oyster Heritage Program was implemented during the period covered by this evaluation using Section 306/306A funds. The program is discussed in greater detail under Section B – Natural Resource Protection, but it has ties to aquaculture, particularly as it relates to the direct and indirect economic benefits of increased oyster harvesting.

The VCP also used Section 309 monies to fund activities in support of aquaculture. Working with the Virginia Marine Resources Commission and the Virginia Institute of Marine Science, the VCP supported several projects, including development of protocols for management of off-bottom culture activities; an assessment of potential conflicts in some current environmental policies; the development of an education booklet about the state's laws, regulations, and requirements for marine shellfish aquaculture; and the establishment of a general state permit for noncommercial shellfish growing activities. Work has also been done to develop guidance for siting aquaculture activities and to develop guidance and/or regulations to reduce conflicts and sustain aquaculture in those areas.

One of the most significant aquaculture-related issues involves the introduction of a non-native oyster species into the Chesapeake Bay. The effects of the issue go beyond the state of Virginia, which is proposing to introduce a nonnative oyster from Asia, *Crassostrea ariakensis*, to help revive the oyster industry. As discussed in sections addressing the Virginia Oyster Heritage Program, the abundance of the oyster native to the Chesapeake Bay, *Crassostrea virginica*, has plummeted to less than 1% of its original abundance in the Bay. This decrease has adversely affected the economy, the livelihood of oystermen, water quality, and biodiversity in the Bay. However, introduction of a nonnative oyster is replete with unanswered questions and associated risks.

The VCP is clearly committed to the resurgence of *C. Virginica* and efforts to create new oyster reefs and sustainable harvest areas. However, the program has also recognized that there are many uncertainties and problems associated with returning the native oyster to levels of abundance once seen in the early 1900s and that discussions and proposals to introduce a nonnative species will continue. Questions about and risks associated with introducing a nonnative oyster require data and studies upon which to base decisions. The Chesapeake Bay Commission requested that the National Research Council of the National Academies undertake such a study, and the VCP provided some funding to the National Academy of Science for that effort, which began in the summer of 2002. The report highlighted the risks to introducing nonnative oysters that should be addressed with additional research and aquaculture protocols. The VCP is staying abreast of these issues by communicating with the VMRC and the academic community. Moreover, this and related fisheries issues are being considered by the VCP as it review program change priorities.

VI. CONCLUSION

Based upon the recent evaluation of the Virginia Coastal Resources Management Program (VCP), I find that the Commonwealth of Virginia is adhering to its approved program and is making satisfactory progress in implementing the provisions of its approved coastal management program. The VCP has made notable progress in the following areas: (1) Program Operation and Coordination - Organization; (2) Program Operation and Coordination - Financial and Technical Assistance; (3) Program Operation and Coordination - Programmatic Coordination; (4) Program Operation and Coordination - Program Effectiveness and Assessment; (5) Natural Resource Protection; (6) Hazards; (7) Water Quality; (8) Public Access; and (9) Public Outreach.

The evaluation team identified the following four areas where the VCP could be strengthened or improved: (1) Program Operation and Coordination - Programmatic Coordination; (2) Program Operation and Coordination - Program Effectiveness and Assessment; (3) Federal Consistency, Permitting, and Changes to the Statutory and Regulatory Provisions of the VCP; and (4) Public Outreach.

These evaluation findings contain four recommendations – one Necessary Action that is mandatory and three Program Suggestions that should be considered by the VCP prior to the next §312 evaluation of the program.

This is a programmatic evaluation of the VCP that may have implications regarding the state's financial assistance awards(s). However, it does not make any judgment about, or replace any financial audit(s) related to, the allowability or allocability of any costs incurred.

Date

Eldon Hout, Director
Office of Ocean and Coastal
Resource Management

LIST OF PERSONS CONTACTED

U.S. Senators

Honorable George Allen
Honorable John Warner

U.S. Representatives

Honorable Eric Cantor	Honorable James Moran
Honorable JoAnn Davis	Honorable Edward Schrock
Honorable J. Randy Forbes	Honorable Robert Scott
	Honorable Frank Wolf

Virginia Natural Resources Agencies

Tayloe Murphy, Secretary

Department of Environmental Quality

Robert Burnley, Director
Michael Murphy, Director, Division of Environmental Enhancement
Laura McKay, Manager, Coastal Program
Julie Bixby, Coastal Program
Kendell Jenkins, Coastal Program
Shep Moon, Coastal Program
Krista Trono, Coastal Program
Virginia Witmer, Coastal Program
Ellie Irons, Office of Environmental Impact Review
Charlie Ellis, Office of Environmental Impact Review
Anne Newsom, Office of Environmental Impact Review
Jennifer Comfort, Office of Environmental Education
Tom Griffin, Pollution Prevention Program
Keith Boisvert, Pollution Prevention Program
John Kennedy, Water Division, Chesapeake Bay Program
Arthur Butt, Water Division, Chesapeake Bay Program
Dan Salkovitz, Air Division
Dave Davis, Water Protection Program
Valerie Thomson, Director, Administrative Division
Patty Walsh, Administrative Division

Department of Conservation and Recreation

Tom Smith, Division of Natural Heritage
Dot Field, Natural Heritage Program
Rick Myers, Natural Heritage Program
Mark Slauter, Division of Soil and Water Conservation
Rick Hill, Division of Soil and Water Conservation
John Davy, Division of Planning and Recreation

Other State Agency Representatives

Tony Watkinson, Marine Resources Commission
Jim Wesson, Marine Resources Commission
J. Michael Foreman, Department of Forestry
Bob Croonenberghs, Department of Health
Martha Little, Chesapeake Bay Local Assistance Department

College of William and Mary

P.G. Ross, Virginia Institute of Marine Science
Bob Orth, Virginia Institute of Marine Science
Lyle Varnell, Virginia Institute of Marine Science
Scott Hardaway, Virginia Institute of Marine Science
Donna Milligan, Virginia Institute of Marine Science
Pam Mason, Virginia Institute of Marine Science
Carl Herschner, Virginia Institute of Marine Science
Bill DuPaul, Virginia Institute of Marine Science
William Reay, Virginia Institute of Marine Science; Manager, Chesapeake Bay National
Estuarine Research Reserve-VA
Bryan Watts, Center for Conservation Biology

Planning District Commissions

Lewie Lawrence, Middle Peninsula Planning District Commission
Dan Kavanagh, Middle Peninsula Planning District Commission
David Fuss, Middle Peninsula Planning District Commission
Stuart McKenzie, Northern Neck Planning District Commission
Micqui Whiddon, Northern Neck Planning District Commission
John Carlock, Hampton Roads Planning District Commission
Eric Walberg, Hampton Roads Planning District Commission
Katherine Mull, Northern Virginia Regional Commission
Victor Liu, Crater Planning District Commission
Eldon James, Rappahannock Area Development Commission
Christine Fix, Richmond Regional Planning District Commission
Jacqueline S. Stewart, Richmond Regional Planning District Commission
Paul Berge, Accomack-Norhampton Planning District Commission

Local Governments

Kathryn Crawford, Northampton County
Anne Ducey-Ortiz, Gloucester County

Federal Agencies

Paula Jasinski, NOAA Chesapeake Bay Office
Rich Takacs, NOAA-Chesapeake Bay Office

Others

Andy Lacatell, The Nature Conservancy

Barry Truitt, The Nature Conservancy

Rob Brumbaugh, Chesapeake Bay Foundation

Cliff Schroeder, Virginia Oyster Reef Heritage Foundation

PERSONS ATTENDING THE PUBLIC MEETING

The public meeting was held on Monday, August 11, 2003, at 4:30 p.m. at the Department of Environmental Quality, 629 East Main Street, First Floor Conference Room, Richmond, Virginia.

No one attended the public meeting.

WRITTEN COMMENTS RECEIVED AND RESPONSES

No written comments were received regarding the implementation of the Virginia Coastal Resources Management Program during the conduct of this review.

RESPONSE TO PREVIOUS (2000) EVALUATION FINDINGS

PROGRAM SUGGESTION 1: The VCP should meet individually with reporters and legislators to brief them on programmatic initiatives and issues, develop press kits tailored to specific legislative areas and develop a more user friendly and readable program document. It should consider some form of awareness vehicle, such as an agency coastal conference, to develop a programmatic coastal consciousness among those entities networked within the VCP.

Response: Program visibility and distinct identity awareness are inherently difficult for networked programs. The VCP has been successful in developing awareness of the VCP itself through the Virginia Oyster Heritage Program and the Virginia Seaside Heritage Program activities. The VCP's website is very user-friendly and provides clear evidence to the reader or browser about the wide range of activities in which the VCP is involved. The VCP has produced an informative and readable program brochure, and the website provides access to many documents and reports, such as the VCP project catalog, the State of the Coast Report, and the Coastal Management magazine, all of which raise awareness about the VCP and its activities. The VCP held two "Virginia Coastal Partners Workshops" in 1993 and 1996 to bring together both networked agencies and other partners. The workshop was held again in 2001 and 2003, and the VCP hopes to make this a biennial event. It is still considering some sort of "reporter escort," where one of the VCP staff members would accompany a reporter to a newsworthy coastal project site or event.

PROGRAM SUGGESTION 2: The VCP should constitute a staff level council to address jointly shared coastal issues and act as a coordination mechanism for consistent State agency action. It should also consider reconstituting an executive level council if and when appropriate at some time in the future.

Response: The VCP has created a Coastal Policy Team. See discussion under Section V., A. – Program Operation and Coordination.

PROGRAM SUGGESTION 3: The VCP should carefully consider what is to be proposed as a program change or auto-incorporated into the Program and work with OCRM on an advance schedule of submission.

Response: The VCP staff have worked with OCRM but are behind in submitting program changes and need to get the program submissions up to date. See also the discussion in Section V., F. – Federal Consistency, Permitting, and Changes to the Statutory and Regulatory Programs of the VCP.

PROGRAM SUGGESTION 4: The VCP should continue and complete the research projects begun during this review period and use the new Coastal Policy Team to develop and advance policies or interagency agreements to strike an appropriate balance of waterway uses.

Response: The VCP and the Coastal Policy Team are addressing water use conflicts when appropriate; for example, the program's aquaculture management strategy includes work to develop guidance and/or regulations to reduce use conflicts. In 2001, representatives from a broad range of local, state, and federal agencies signed a Memorandum of Agreement to improve water use conflict education for the North Landing River. The MOA outlines recommended water use areas to minimize conflict between the diverse set of recreational and commercial users of the river. The MOA also includes a Water Use Plan Map for the North Landing River that depicts the areas of the river that are best suited for low impact recreation, general recreation, and special use/high speed recreation.

PROGRAM SUGGESTION 5: The VCP should consider a program to educate the public on the importance of nontidal wetlands in concert with assessing existing nontidal wetlands regulations to protect, and suggest measures to fill any gaps in protection.

Response: This suggestion has been addressed. See discussion under Section V., B. – Natural Resource Protection, *Nontidal Wetlands*.

PROGRAM SUGGESTION 6: The VCP should (1) support development of information on the distribution, function and value of dune systems in an effort to inform decision makers and (2) assess existing protective regulations relative to secondary and riverine dune systems, and suggest measures to fill any gaps in their protection. This is consistent with the VCP Executive Order which directs the program “conserve sand dune systems.”

Response: This suggestion has been addressed. See discussion under Section V., C. – Hazards.

PROGRAM SUGGESTION 7: In special area management planning efforts the VCP should stress education regarding the value of the resources to be protected as a part of the process.

Response: The VCP has been increasing its education and outreach activities throughout all its financial and technical assistance efforts, including the special area management planning projects. See discussion under Section V., G. - Public Outreach, and B. - Natural Resource Protection, *Special Area Management Planning*. The Northampton SAMP addresses the value of its location and resources as one of the two most important concentration areas on the Atlantic coast for fall migration of neotropical songbirds through the annual Eastern Shore Birding Festival held each fall. It educates the participants about the value of the migratory bird habitat and provides a source of much-needed tourism income for

the county. The annual Green Sea Festival is an educational component of the Southern Watersheds SAMP and was created to emphasize the value of the cultural and natural resources of the southern watersheds. The newest SAMP, the Dragon Run, identifies a specific project goal to “foster educational opportunities to establish the community’s connection to and respect for the watershed.”